

Amendments to the Specification

Replace the paragraph on page 18, line 16 - page 19, line 3 with the following rewritten paragraph:

In certain embodiments, an N-terminal extension peptide sequence may be added to the dermaseptin or temporin peptide. Such peptide extensions may comprise portions of the precursor forms of dermaseptins or temporins that are usually removed during protein processing, or may be synthetic sequences. These N-terminal peptide extensions may serve to provide enhanced resistance to proteolytic cleavage, enhance transcription levels, or enhance the antimicrobial activity of the peptides. Typically, these N-terminal extensions are of between 2 and 25 amino acids in length, although longer extensions may also be employed. Examples of N-terminal extension sequences that are utilized in certain embodiments include the peptide sequences AMWK, ASRH, and ALWK. The AMWK (SEQ ID: 39) sequence is a naturally-occurring peptide extension; it is part of the full-length dermaseptin-b peptide sequence that is normally cleaved during processing. The addition of this sequence to the N-terminus of dermaseptin b (to produce dermaseptin B) has been reported to enhance the in vitro antimicrobial activity of the peptide (Strahilevitz, *Biochemistry*, 33:10951-10960, 1995). The ASRH (SEQ ID: 41~~40~~), and ALWK (SEQ ID:41) peptides are synthetic extension sequence. In each case, an N-terminal methionine is added to ensure proper expression of the peptide. One of skill in the art will appreciate that the effect of adding any particular N-terminal extension peptide on the biological activity of the peptide being produced (dermaseptin or temporin) may readily be assessed using the biological activity assay described above.